Principles of Computer Systems

December 17, 2024

This test has XXX questions totaling 100 points. You have 105 minutes to answer them. If you find yourself spending on any given question more minutes than the number of points attributed to it, you might consider moving on to the next question.

There is a mix of four kinds of questions:

- *ONE*: One-sentence answers related to a system or concept discussed in class. ONEs allow you to demonstrate your ability to identify, synthesize, and clearly state the essence of what you have learned. These are questions like: "summarize the motivation for X" or "identify the key insight behind X" or "describe the main trade-off exploited by X" or "what technological shift enabled the design of X".
- *OPAR*: One-paragraph answers related to a system or concept discussed. These are similar to ONEs, but with an opportunity to include more ample details and go in more depth.
- *BOE*: Back-of-the-envelope calculations that assess your ability to perform the quantitative reasoning that underlies intelligent design decisions.
- *MCQ*: Multiple-choice questions where you must check 1 or more of the 5 options provided. No justification is required, and nothing other than the checked boxes will be taken into account during grading. The MCQs efficiently test the breadth of your knowledge, covering many topics in a short amount of time.

Your answer to each question must be entirely within the box provided on the exam sheet. You have a few spare sheets at the end of the exam. Anything outside the boxes will be discarded prior to grading.

The exam takes place in room BC 01, and you must be physically present to take it. The exam is a written exam, and you need to bring your own pen. The exam starts at 11:15 and ends at 13:00.

Rules:

- The exam is closed-book. You are allowed to bring with you one double-sided A4 cheat sheet with whatever information you want on it, in whatever font size you like.

- You are not permitted to interact with or receive or give any assistance for the exam except with/from the course staff.

- If you are noise-sensitive, you may wear ear plugs or ear muffs, but no electronic device is permitted (no headphones, no earbuds, no active noise-canceling device, etc.).

Read each question carefully. You need to provide a correct and complete answer to the *correct* question in order to receive full credit. A correct answer to a *wrong or misinterpreted* question will not earn credit. If you have any doubts, raise your hand, and the course staff will come to help.

SCIPER ☐☐☐☐☐☐